Billroth first did supra-pubic cystotomy on finding that the perineal operation would not answer, on account of the size of the tumour, a method also adopted by Volkmann in the same year. The first patient recovered, the second died. In the same year Kocher removed a papilloma by a scoop through a ⊥ incision in the perineum. In 1877 and in 1880, Humphry and Davies Colley by the lateral operation for stone reached and removed two tumours; the first by the finger-nail and forceps, the latter by the scissors. All these cases recovered. In 1880 Marcacci did a supra-pubic cystotomy, and removed a very large tumour. He closed the vesical wound by four catgut sutures, which, however, seemed to give way too early, when extravasation of urine occurred, and the patient died, worn out, in two months.

In all, 34 operations have been done; 23 in females and 11 in males. In 17 of the former operations the access was by the dilated urethra. In 6 by incision of the urethra or through the septum. Of the 17, ten recovered; of the 6, three. Of the 11 operations on males, eight were by the perineum, two by the perineum and above the pubes together, and one by supra-pubic cystotomy alone. Of the 11 six recovered. The apparently large death-rate in the operations in the male is explained, to a great extent, by the peculiar histories, and in ordinary cases much better results may be expected hereafter. In epi-cystotomy he calls attention to T. G. Thomas's recent case of ovariotomy, in which the bladder had to be opened, and the vesical wound was closed by the sutures used for uniting the abdominal wound, the vesical walls being interposed between the lips of the abdominal wound.

Dr. Stein is a strong advocate for an early operation even in the absence of severe secondary symptoms, on the ground that if no operation be done the case can only go from bad to worse. Indeed, he justly believes that if there be strong evidence in favour of a vesical tumour, and the catarrh and the consequent suffering be severe, an operation of exploration is justifiable; for, if a removable tumour exist, it may be extirpated, or if it be a hopeless case, or if no growth exist, the cystotomy will give ample temporary relief.

We have given comparatively large space to a small book, but it is one of the books that deserve it. W. W. K.

ART. XXV.—*Health Reports.*

1. *Fourth Annual Report of the State Board of Health of the State of Rhode Island for the year ending December* 31, 1881. Providence, 1882. pp. 350.
2. *First Biennial Report of the State Board of Health of the State of Iowa for the fiscal year ending September* 30, 1881. Des Moines, 1882. pp. 346.

1. ACCORDING to the preliminary report of the Secretary the average health of *Rhode Island* has exhibited no great departure from the circumstances which usually prevail. The most remarkable of the special forms of disease which displayed unusual virulence and frequency, has been malarial fever, which, as we have already previously noticed, seems to be

resistlessly spreading over Connecticut and Massachusetts also, in a manner curiously suggestive of a gradual dissemination of some organized *materies morbi.* Diphtheria, which had declined in frequency during 1879 and 1880, was again rife, but neither it nor scarlet fever attained to epidemic prevalence except over limited areas and for short periods of time during the year.

The first 216 pages are occupied with the report of the Secretary Charles H. Fisher, M.D., of Providence. This lengthy document is chiefly statistical, and represents in a condensed form, an immense amount of faithful labour in collecting and arranging the multitudinous details respecting births, marriages, and deaths throughout the State. His diagrams illustrating the relative birth and death-rate in different counties and towns, are very clear and satisfactory.

Dr. C. V. Chapin, of Providence, contributes an essay on *Malaria in Rhode Island*, from which it appears that this disease approached from the valley of the Hudson in the neighbouring State of New York, and broke out among some brickmakers in 1880. From the swampy locality where they worked it spread to Providence and to fourteen other towns. No summary of the whole number of cases is furnished, and the author's observations only confirm the doctrine that there is a distinct and specific malarial poison which produces an "immense majority" of the cases in the immediate vicinity of low wet regions.

Parental Education is the subject of a thoughtful paper by Dr. Franklin C. Clark, of Providence, in which the author considers the important subjects of congenital heredity, having for its office the fixation of types, and of acquired heredity through the influence of which alteration of types is accomplished. Dr. Clark concludes that a proper understanding of the law of heredity leads to the proper variety of *prenatal* education to be adopted, and careful attention of this kind to the mother during gestation is followed by the happiest results, although the creation of tendencies or predispositions is all that in the present state of science can be expected.

The most important and timely article in the book is one on *House Drainage and Sanitary Plumbing*, by Wm. Paul Gerhard, Civil and Sanitary Engineer, Newport, R. I., which is worthy of a far wider circulation than it will obtain in this volume. The writer's purpose is, without in any way adding to the "plumbing scare," clearly to define wherein the danger from sewer gas, or more properly sewer air, consists, and to establish rules for the proper drainage and plumbing of houses which may be relied upon as positively safe. Without claiming any special originality in his work, Mr. Gerhard contends that whether the germs of filth diseases are particles of "organic vapour," or microscopic spores, the danger of infection arising from defective drainage and plumbing may be reduced to a mimimum, "by completely removing as speedily as possible all waste matters from the dwelling, by pipes thoroughly and tightly jointed, and by a sufficient dilution of the air in these pipes with oxygen." Our author first considers drains outside of the house, and declares that these should be of earthenware pipe from 4 to 6 inches in diameter, with a fall of 1 foot in 60, laid not less than three feet below the surface, and with well cemented joints. For drains inside the house he urges coal-tarred or enamelled iron pipe (in preference to lead) with perfect joints, to be carefully tested by hydrostatic pressure, or by oil of peppermint. With these preliminary conditions he maintains that the essential elements of a safe system of plumbing are:—

"1st. Extension of all soil and waste pipes through and above the roof. 2. Providing a fresh air inlet in the drain at the foot of the soil and waste pipe system. 3. Trapping the main drain outside of the fresh air inlet, in order entirely to exclude the sewer air from the house. 4. Providing each fixture as near as possible to it with a suitable trap. 5. Providing vent pipes to such water-seal traps under fixtures, as are liable to be emptied by siphonage."

The details of methods for accomplishing these important desiderata are fully explained and illustrated at a length which want of space forbids us to imitate here, but we would recommend the essay in its entirety to every householder who is anxious to escape those most dangerous of all common causes of disease, the emanations from waste pipes and sewers.

2. The report from *Iowa*, being the first of what we hope may prove a long and useful series of sanitary documents, appropriately opens with the Secretary's account of the legislation creating the State Board of Health, the organization of the central and local boards, etc. etc. As usual, there seems to have been many obstacles, arising from popular ignorance and prejudice, to overcome, but through the judicious systematic efforts of the Board towards popular instruction in sanitary matters, by circulars, hygienic lectures, and similar means, we may fairly anticipate the best results in consequence of an enlightened public opinion in regard to care of the public health.

The first essay of the volume, on *Water Supply and its Relation to Health and Disease*, by Dr. W. H. Dickinson, is a clear and judicious exposition of its important subject, and conveys exactly the right kind of information in regard to the dangers of polluted drinking fluids, and the precautions needful for securing pure water. Dr. Dickinson follows Dr. H. B. Baker, Secretary of the Michigan Health Board, in recommending Heisch's test with sugar, as a simple household method for detecting the contamination of drinking water by sewage (p. 216).

The report on *Slaughter Houses*, by P. W. Lewellen, M.D., contains some good suggestions, especially one in regard to a butcher's refrigerator, but is imperfect for want of data, which should have been furnished by local health officers.

L. F. Andrews, of Des Moines, the Secretary of the Board, contributes a paper upon *Glanders in Man and Domestic Animals*. Without claiming any special veterinary skill, or presenting any new facts in regard to this horrible disease, which appears to have been alarmingly prevalent in Iowa, Mr. Andrews has prepared an excellent compilation of our knowledge respecting glanders, which is well calculated to accomplish its praiseworthy object of diffusing information conducive towards preventing a further spread of the disease.

Adulteration of Food, by Dr. R. J. Farquharson, is another useful compilation, giving the recent results of investigations as to the purity of sugar, flour, tea, coffee, butter, etc., made under the auspices of the National Board of Health, and of the Massachusetts and Michigan State Boards.

Short articles on the *Diseases of Domestic Animals and their Relation to the Health of Man*, by Prof. M. Stalker, V. S.; on *Sewerage, Drainage, and Disposal of Excreta*, by James L. Loring, C. E.; and on *Smallpox Hospitals*, by Dr. Farquharson, make up the remainder of the book.

J. G. R.